10/593683

DNA sequence listing.ST25.txt SEQUENCE LISTING

Hı Sı	chillion Pharm Jang, Mingjun Jn, Yongnian Ang, Wengang	maceuticals				
	JANTITATIVE AS ELL-FREE SYSTE					
<130> AF	PI-0005					
	0/555,765 004-04-24					
<160> 8						
<170> Pa	atentIn versio	on 3.2				
<212> DN	989 NA epatitis C vii	rus				
<400> 1	cc gattgggggc	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
	ca gaaagcgtct					120
	cc gggagagcca					180
	gg tcctttcttg					240
	gc tagccgagta					300
	ga gtgccccggg					360
	aa aaccaaaggg					420
	tg ggtggagagg					480
						540
	gc cgtgttccgg					600
	gg tgccctgaat					
	yt tccttgcgca					660
	gg cgaagtgccg					720
_	at catggctgat				_	780
	ca ccaagcgaaa					840
	ca ggatgatctg					900
	aa ggcgcgcatg					960
gcttgccga	aa tatcatggtg	gaaaatggcc	gcttttctgg	attcatcgac	tgtggccggc	1020
tgggtgtg	gc ggaccgctat	caggacatag	cgttggctac	ccgtgatatt	gctgaagagc	1080
ttggcggcg	ga atgggctgac	cgcttcctcg	tgctttacgg	tatcgccgct	cccgattcgc	1140

DNA sequence listing.ST25.txt 1200 agcgcatcgc cttctatcgc cttcttgacg agttcttctg agtttaaaca gaccacaacg gtttccctct agcgggatca attccgcccc tctccctccc cccccctaa cgttactggc 1260 1320 cgaagccgct tggaataagg ccggtgtgcg tttgtctata tgttattttc caccatattg 1380 ccgtcttttg gcaatgtgag ggcccggaaa cctggccctg tcttcttgac gagcattcct 1440 aggggtcttt cccctctcgc caaaggaatg caaggtctgt tgaatgtcgt gaaggaagca 1500 gttcctctgg aagcttcttg aagacaaaca acgtctgtag cgaccctttg caggcagcgg 1560 aacccccac ctggcgacag gtgcctctgc ggccaaaagc cacgtgtata agatacacct 1620 gcaaaggcgg cacaacccca gtgccacgtt gtgagttgga tagttgtgga aagagtcaaa 1680 tggctctcct caagcgtatt caacaagggg ctgaaggatg cccagaaggt accccattgt 1740 atgggatctg atctggggcc tcggtgcaca tgctttacat gtgtttagtc gaggttaaaa 1800 aacgtctagg cccccgaac cacggggacg tggttttcct ttgaaaaaca cgataatacc 1860 atggcgccta ttacggccta ctcccaacag acgcgaggcc tacttggctg catcatcact 1920 agcctcacag gccgggacag gaaccaggtc gagggggagg tccaagtggt ctccaccgca 1980 acacaatctt tcctggcgac ctgcgtcaat ggcgtgtgtt ggactgtcta tcatggtgcc 2040 ggctcaaaga cccttgccgg cccaaagggc ccaatcaccc aaatgtacac caatgtggac 2100 caggacctcg tcggctggca agcgcccccc ggggcgcgtt ccttgacacc atgcacctgc 2160 ggcagctcgg acctttactt ggtcacgagg catgccgatg tcattccggt gcgccggcgg 2220 ggcgacagca gggggagcct actctccccc aggcccgtct cctacttgaa gggctcttcg 2280 ggcggtccac tgctctgccc ctcggggcac gctgtgggca tctttcgggc tgccgtgtgc 2340 acccgagggg ttgcgaaggc ggtggacttt gtacccgtcg agtctatgga aaccactatg 2400 cggtccccgg tcttcacgga caactcgtcc cctccggccg taccgcagac attccaggtg 2460 gcccatctac acgcccctac tggtagcggc aagagcacta aggtgccggc tgcgtatgca 2520 gcccaagggt ataaggtgct tgtcctgaac ccgtccgtcg ccgccaccct aggtttcggg 2580 gcgtatatgt ctaaggcaca tggtatcgac cctaacatca gaaccggggt aaggaccatc 2640 accacgggtg cccccatcac gtactccacc tatggcaagt ttcttgccga cggtggttgc 2700 tctgggggcg cctatgacat cataatatgt gatgagtgcc actcaactga ctcgaccact 2760 atcctgggca tcggcacagt cctggaccaa gcggagacgg ctggagcgcg actcgtcgtg 2820 ctcgccaccg ctacgcctcc gggatcggtc accgtgccac atccaaacat cgaggaggtg 2880 gctctgtcca gcactggaga aatccccttt tatggcaaag ccatccccat cgagaccatc 2940 aaggggggga ggcacctcat tttctgccat tccaagaaga aatgtgatga gctcgccgcg 3000 aagctgtccg gcctcggact caatgctgta gcatattacc ggggccttga tgtatccgtc

ataccaacta gcggagacgt cattgtcgta gcaacggacg ctctaatgac gggctttacc

Page 2

3060

ggcgatttcg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggacccga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcggt	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatgtt	cgattcctcg	gttctgtgcg	agtgctatga	cgcgggctgt	3300
gcttggtacg	agctcacgcc	cgccgagacc	tcagttaggt	tgcgggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	3420
acccacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	3540
caaatgtgga	agtgtctcat	acggctaaag	cctacgctgc	acgggccaac	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgtcggctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtggtcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccgacaggg	aagtccttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacagggaat	gcagctcgcc	3900
gaacaattca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggaggct	3960
gctgctcccg	tggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tggaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgctcac	cacccaacat	4140
accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	tcccagcgct	4200
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aaggtgcttg	tggatatttt	ggcaggttat	ggagcagggg	tggcaggcgc	gctcgtggcc	4320
tttaaggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtgggcccag	gggaggggc	tgtgcagtgg	atgaaccggc	tgatagcgtt	cgcttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acggtgttga	ctgatttcaa	gacctggctc	cagtccaagc	tcctgccgcg	attgccggga	4740
gtccccttct	tctcatgtca	acgtgggtac	aagggagtct	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccatgtgg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaacacg	tggcatggaa	cattccccat	taacgcgtac	4920

DNA sequence listing.ST25.txt accacgggcc cctgcacgcc ctccccggcg ccaaattatt ctagggcgct gtggcgggtg 4980 gctgctgagg agtacgtgga ggttacgcgg gtgggggatt tccactacgt gacgggcatg 5040 accactgaca acgtaaagtg cccgtgtcag gttccggccc ccgaattctt cacagaagtg 5100 5160 gatggggtgc ggttgcacag gtacgctcca gcgtgcaaac ccctcctacg ggaggaggtc 5220 acattcctgg tcgggctcaa tcaatacctg gttgggtcac agctcccatg cgagcccgaa 5280 ccggacgtag cagtgctcac ttccatgctc accgacccct cccacattac ggcggagacg 5340 gctaagcgta ggctggccag gggatctccc ccctccttgg ccagctcatc agctagccag ctgtctgcgc cttccttgaa ggcaacatgc actacccgtc atgactcccc ggacgctgac 5400 5460 ctcatcgagg ccaacctcct gtggcggcag gagatgggcg ggaacatcac ccgcgtggag tcagaaaata aggtagtaat tttggactct ttcgagccgc tccaagcgga ggaggatgag 5520 5580 agggaagtat ccgttccggc ggagatcctg cggaggtcca ggaaattccc tcgagcgatg cccatatggg cacgcccgga ttacaaccct ccactgttag agtcctggaa ggacccggac 5640 5700 tacgtccctc cagtggtaca cgggtgtcca ttgccgcctg ccaaggcccc tccgatacca cctccacgga ggaagaggac ggttgtcctg tcagaatcta ccgtgtcttc tgccttggcg 5760 5820 5880 acggcctctc ctgaccagcc ctccgacgac ggcgacgcgg gatccgacgt tgagtcgtac tcctccatgc cccccttga gggggagccg ggggatcccg atctcagcga cgggtcttgg 5940 tctaccgtaa gcgaggaggc tagtgaggac gtcgtctgct gctcgatgtc ctacacatgg 6000 acaggcgccc tgatcacgcc atgcgctgcg gaggaaacca agctgcccat caatgcactg 6060 6120 agcaactctt tgctccgtca ccacaacttg gtctatgcta caacatctcg cagcgcaagc 6180 ctgcggcaga agaaggtcac ctttgacaga ctgcaggtcc tggacgacca ctaccgggac 6240 gtgctcaagg agatgaaggc gaaggcgtcc acagttaagg ctaaacttct atccgtggag gaagcctgta agctgacgcc cccacattcg gccagatcta aatttggcta tggggcaaag 6300 6360 gacgtccgga acctatccag caaggccgtt aaccacatcc gctccgtgtg gaaggacttg 6420 ctggaagaca ctgagacacc aattgacacc accatcatgg caaaaaatga ggttttctgc gtccaaccag agaagggggg ccgcaagcca gctcgcctta tcgtattccc agatttgggg 6480 gttcgtgtgt gcgagaaaat ggccctttac gatgtggtct ccaccctccc tcaggccgtg 6540 6600 atgggctctt catacggatt ccaatactct cctggacagc gggtcgagtt cctggtgaat gcctggaaag cgaagaaatg ccctatgggc ttcgcatatg acacccgctg ttttgactca 6660 6720 acggtcactg agaatgacat ccgtgttgag gagtcaatct accaatgttg tgacttggcc cccgaagcca gacaggccat aaggtcgctc acagagcggc tttacatcgg gggccccctg 6780 6840 actaattcta aagggcagaa ctgcggctat cgccggtgcc gcgcgagcgg tgtactgacg

Page 4

accagctgcg	gtaataccct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgccccc	ctggggaccc	gcccaaacca	gaatacgact	tggagttgat	aacatcatgc	7080
tcctccaatg	tgtcagtcgc	gcacgatgca	tctggcaaaa	gggtgtacta	tctcacccgt	7140
gaccccacca	cccccttgc	gcgggctgcg	tgggagacag	ctagacacac	tccagtcaat	7200
tcctggctag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatcctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	tagggtggct	7440
tcatgcctca	ggaaacttgg	ggtaccgccc	ttgcgagtct	ggagacatcg	ggccagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgacccc	gctggttcat	gtggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggagctaa	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	ttttttctt	tttttttt	tttttttt	tttttttt	ttctcctttt	7860
tttttcctct	ttttttcctt	ttctttcctt	tggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggtccgtga	gccgcttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagt						7989
<210> 2 <211> 8024 <212> DNA <213> Hepa	l atitis C vi	rus				
<400> 2 acctgcccct	aataggggcg	acactccgcc	atgaatcact	cccctgtgag	gaactactgt	60
cttcacgcag	aaagcgccta	gccatggcgt	tagtatgagt	gtcgtacagc	ctccaggccc	120
cccctcccg	ggagagccat	agtggtctgc	ggaaccggtg	agtacaccgg	aattgccggg	180
aagactgggt	cctttcttgg	ataaacccac	tctatgcccg	gccatttggg	cgtgcccccg	240
caagactgct	agccgagtag	cgttgggttg	cgaaaggcct	tgtggtactg	cctgataggg	300
cgcttgcgag	tgccccggga	ggtctcgtag	accgtgcacc	atgagcacaa	atcctaaacc	360
tcaaagaaaa	accaaaagaa	acaccaaccg	tcgcccaatg	attgaacaag	atggattgca	420
cgcaggttct	ccggccgctt	gggtggagag	gctattcggc Page	tatgactggg 5	cacaacagac	480

aatcggctgc	tctgatgccg	ccgtgttccg	gctgtcagcg	caggggcgcc	cggttcttt	540
tgtcaagacc	gacctgtccg	gtgccctgaa	tgaactgcag	gacgaggcag	cgcggctatc	600
gtggctggcc	acgacgggcg	ttccttgcgc	agctgtgctc	gacgttgtca	ctgaagcggg	660
aagggactgg	ctgctattgg	gcgaagtgcc	ggggcaggat	ctcctgtcat	ctcaccttgc	720
tcctgccgag	aaagtatcca	tcatggctga	tgcaatgcgg	cggctgcata	cgcttgatcc	780
ggctacctgc	ccattcgacc	accaagcgaa	acatcgcatc	gagcgagcac	gtactcggat	840
ggaagccggt	cttgtcgatc	aggatgatct	ggacgaagag	catcaggggc	tcgcgccagc	900
cgaactgttc	gccaggctca	aggcgcgcat	gcccgacggc	gaggatctcg	tcgtgaccca	960
tggcgatgcc	tgcttgccga	atatcatggt	ggaaaatggc	cgcttttctg	gattcatcga	1020
ctgtggccgg	ctgggtgtgg	cggaccgcta	tcaggacata	gcgttggcta	cccgtgatat	1080
tgctgaagag	cttggcggcg	aatgggctga	ccgcttcctc	gtgctttacg	gtatcgccgc	1140
tcccgattcg	cagcgcatcg	ccttctatcg	ccttcttgac	gagttcttct	gagtttaaac	1200
cctctccctc	ccccccct	aacgttactg	gccgaagccg	cttggaataa	ggccggtgtg	1260
cgtttgtcta	tatgttattt	tccaccatat	tgccgtcttt	tggcaatgtg	agggcccgga	1320
aacctggccc	tgtcttcttg	acgagcattc	ctaggggtct	ttccctctc	gccaaaggaa	1380
tgcaaggtct	gttgaatgtc	gtgaaggaag	cagttcctct	ggaagcttct	tgaagacaaa	1440
caacgtctgt	agcgaccctt	tgcaggcagc	ggaacccccc	acctggcgac	aggtgcctct	1500
gcggccaaaa	gccacgtgta	taagatacac	ctgcaaaggc	ggcacaaccc	cagtgccacg	1560
ttgtgagttg	gatagttgtg	gaaagagtca	aatggctctc	ctcaagcgta	ttcaacaagg	1620
ggctgaagga	tgcccagaag	gtaccccatt	gtatgggatc	tgatctgggg	cctcggtgca	1680
catgctttac	atgtgtttag	tcgaggttaa	aaaaacgtct	aggccccccg	aaccacgggg	1740
acgtggtttt	cctttgaaaa	acacgatgat	accatggctc	ccatcactgc	ttatgcccag	1800
caaacacgag	gcctcctggg	cgccatagtg	gtgagtatga	cggggcgtga	caggacagaa	1860
caggccgggg	aagtccaaat	cctgtccaca	gtctctcagt	ccttcctcgg	aacaaccatc	1920
tcgggggttt	tgtggactgt	ttaccacgga	gctggcaaca	agactctagc	cggcttacgg	1980
ggtccggtca	cgcagatgta	ctcgagtgct	gagggggact	tggtaggctg	gcccagcccc	2040
cctgggacca	agtctttgga	gccgtgcaag	tgtggagccg	tcgacctata	tctggtcacg	2100
cggaacgctg	atgtcatccc	ggctcggaga	cgcggggaca	agcggggagc	attgctctcc	2160
ccgagaccca	tttcgacctt	gaaggggtcc	tcgggggggc	cggtgctctg	ccctaggggc	2220
cacgtcgttg	ggctcttccg	agcagctgtg	tgctctcggg	gcgtggccaa	atccatcgat	2280
ttcatccccg	ttgagacact	cgacgttgtt	acaaggtctc	ccactttcag	tgacaacagc	2340

DNA sequence listing.ST25.txt acgccaccgg ctgtgcccca gacctatcag gtcgggtact tgcatgctcc aactggcagt 2400 ggaaagagca ccaaggtccc tgtcgcgtat gccgcccagg ggtacaaagt actagtgctt 2460 2520 aacccctcgg tagctgccac cctggggttt ggggcgtacc tatccaaggc acatggcatc 2580 aatcccaaca ttaggactgg agtcaggacc gtgatgaccg gggaggccat cacgtactcc 2640 acatatggca aatttctcgc cgatgggggc tgcgctagcg gcgcctatga catcatcata 2700 tgcgatgaat gccacgctgt ggatgctacc tccattctcg gcatcggaac ggtccttgat 2760 caagcagaga cagccggggt cagactaact gtgctggcta cggccacacc ccccgggtca 2820 gtgacaaccc cccatcccga tatagaagag gtaggcctcg ggcgggaggg tgagatcccc 2880 ttctatggga gggcgattcc cctatcctgc atcaagggag ggagacacct gattttctgc 2940 cactcaaaga aaaagtgtga cgagctcgcg gcggcccttc ggggcatggg cttgaatgcc 3000 gtggcatact atagagggtt ggacgtctcc ataataccag ctcagggaga tgtggtggtc 3060 gtcgccaccg acgccctcat gacggggtac actggagact ttgactccgt gatcgactgc 3120 aatgtagcgg tcacccaagc tgtcgacttc agcctggacc ccaccttcac tataaccaca 3180 cagactgtcc cacaagacgc tgtctcacgc agtcagcgcc gcgggcgcac aggtagagga 3240 agacagggca cttataggta tgtttccact ggtgaacgag cctcaggaat gtttgacagt 3300 gtagtgcttt gtgagtgcta cgacgcaggg gctgcgtggt acgatctcac accagcggag 3360 accaccgtca ggcttagagc gtatttcaac acgcccggcc tacccgtgtg tcaagaccat 3420 cttgaatttt gggaggcagt tttcaccggc ctcacacaca tagacgccca cttcctctc caaacaaagc aagcggggga gaacttcgcg tacctagtag cctaccaagc tacggtgtgc 3480 3540 gccagagcca aggcccctcc cccgtcctgg gacgccatgt ggaagtgcct ggcccgactc 3600 aagcctacgc ttgcgggccc cacacctctc ctgtaccgtt tgggccctat taccaatgag 3660 gtcaccctca cacaccctgg gacgaagtac atcgccacat gcatgcaagc tgaccttgag gtcatgacca gcacgtgggt cctagctgga ggagtcctgg cagccgtcgc cgcatattgc 3720 3780 ctggcgactg gatgcgtttc catcatcggc cgcttgcacg tcaaccagcg agtcgtcgtt 3840 gcgccggata aggaggtcct gtatgaggct tttgatgaga tggaggaatg cgcctctagg 3900 gcggctctca tcgaagaggg gcagcggata gccgagatgt tgaagtccaa gatccaaggc ttgctgcagc aggcctctaa gcaggcccag gacatacaac ccgctatgca ggcttcatgg 3960 4020 cccaaagtgg aacaattttg ggccagacac atgtggaact tcattagcgg catccaatac ctcgcaggat tgtcaacact gccagggaac cccgcggtgg cttccatgat ggcattcagt 4080 gccgccctca ccagtccgtt gtcgaccagt accaccatcc ttctcaacat catgggaggc 4140 4200 tggttagcgt cccagatcgc accacccgcg ggggccaccg gctttgtcgt cagtggcctg 4260 gtgggggctg ccgtgggcag cataggcctg ggtaaggtgc tggtggacat cctggcagga

Page 7

tatggtgcgg	gcatttcggg	ggccctcgtc	gcattcaaga	tcatgtctgg	cgagaagccc	4320
tctatggaag	atgtcatcaa	tctactgcct	gggatcctgt	ctccgggagc	cctggtggtg	4380
ggggtcatct	gcgcggccat	tctgcgccgc	cacgtgggac	cgggggaggg	cgcggtccaa	4440
tggatgaaca	ggcttattgc	ctttgcttcc	agaggaaacc	acgtcgcccc	tactcactac	4500
gtgacggagt	cggatgcgtc	gcagcgtgtg	acccaactac	ttggctctct	tactataacc	4560
agcctactca	gaagactcca	caattggata	actgaggact	gccccatccc	atgctccgga	4620
tcctggctcc	gcgacgtgtg	ggactgggtt	tgcaccatct	tgacagactt	caaaaattgg	4680
ctgacctcta	aattgttccc	caagctgccc	ggcctcccct	tcatctcttg	tcaaaagggg	4740
tacaagggtg	tgtgggccgg	cactggcatc	atgaccacgc	gctgcccttg	cggcgccaac	4800
atctctggca	atgtccgcct	gggctctatg	aggatcacag	ggcctaaaac	ctgcatgaac	4860
acctggcagg	ggacctttcc	tatcaattgc	tacacggagg	gccagtgcgc	gccgaaaccc	4920
cccacgaact	acaagaccgc	catctggagg	gtggcggcct	cggagtacgc	ggaggtgacg	4980
cagcatgggt	cgtactccta	tgtaacagga	ctgaccactg	acaatctgaa	aattccttgc	5040
caactacctt	ctccagagtt	tttctcctgg	gtggacggtg	tgcagatcca	taggtttgca	5100
cccacaccaa	agccgttttt	ccgggatgag	gtctcgttct	gcgttgggct	taattcctat	5160
gctgtcgggt	cccagcttcc	ctgtgaacct	gagcccgacg	cagacgtatt	gaggtccatg	5220
ctaacagatc	cgccccacat	cacggcggag	actgcggcgc	ggcgcttggc	acggggatca	5280
cctccatctg	aggcgagctc	ctcagtgagc	cagctatcag	caccgtcgct	gcgggccacc	5340
tgcaccaccc	acagcaacac	ctatgacgtg	gacatggtcg	atgccaacct	gctcatggag	5400
ggcggtgtgg	ctcagacaga	gcctgagtcc	agggtgcccg	ttctggactt	tctcgagcca	5460
atggccgagg	aagagagcga	ccttgagccc	tcaataccat	cggagtgcat	gctccccagg	5520
agcgggtttc	cacgggcctt	accggcttgg	gcacggcctg	actacaaccc	gccgctcgtg	5580
gaatcgtgga	ggaggccaga	ttaccaaccg	cccaccgttg	ctggttgtgc	tctcccccc	5640
cccaagaagg	ccccgacgcc	tccccaagg	agacgccgga	cagtgggtct	gagcgagagc	5700
accatatcag	aagccctcca	gcaactggcc	atcaagacct	ttggccagcc	cccctcgagc	5760
ggtgatgcag	gctcgtccac	gggggcgggc	gccgccgaat	ccggcggtcc	gacgtcccct	5820
ggtgagccgg	cccctcaga	gacaggttcc	gcctcctcta	tgcccccct	cgagggggag	5880
cctggagatc	cggacctgga	gtctgatcag	gtagagcttc	aacctccccc	ccaggggggg	5940
ggggtagctc	ccggttcggg	ctcggggtct	tggtctactt	gctccgagga	ggacgatacc	6000
accgtgtgct	gctccatgtc	atactcctgg	accggggctc	taataactcc	ctgtagcccc	6060
gaagaggaaa	agttgccaat	caaccctttg	agtaactcgc	tgttgcgata	ccataacaag	6120

6180 gtgtactgta caacatcaaa gagcgcctca cagagggcta aaaaggtaac ttttgacagg 6240 acgcaagtgc tcgacgccca ttatgactca gtcttaaagg acatcaagct agcggcttcc aaggtcagcg caaggctcct caccttggag gaggcgtgcc agttgactcc accccattct 6300 gcaagatcca agtatggatt cggggccaag gaggtccgca gcttgtccgg gagggccgtt 6360 6420 aaccacatca agtccgtgtg gaaggacctc ctggaagacc cacaaacacc aattcccaca 6480 accatcatgg ccaaaaatga ggtgttctgc gtggaccccg ccaagggggg taagaaacca gctcgcctca tcgtttaccc tgacctcggc gtccgggtct gcgagaaaat ggccctctat 6540 6600 gacattacac aaaagcttcc tcaggcggta atgggagctt cctatggctt ccagtactcc 6660 cctgcccaac gggtggagta tctcttgaaa gcatgggcgg aaaagaagga ccccatgggt ttttcgtatg atacccgatg cttcgactca accgtcactg agagagacat caggaccgag 6720 6780 gagtccatat accaggcctg ctccctgccc gaggaggccc gcactgccat acactcgctg 6840 actgagagac tttacgtagg agggcccatg ttcaacagca agggtcaaac ctgcggttac agacgttgcc gcgccagcgg ggtgctaacc actagcatgg gtaacaccat cacatgctat 6900 6960 gtgaaagccc tagcggcctg caaggctgcg gggatagttg cgcccacaat gctggtatgc 7020 ggcgatgacc tagtagtcat ctcagaaagc caggggactg aggaggacga gcggaacctg 7080 agagccttca cggaggccat gaccaggtac tctgcccctc ctggtgatcc ccccagaccg 7140 gaatatgacc tggagctaat aacatcctgt tcctcaaatg tgtctgtggc gttgggcccg 7200 cggggccgcc gcagatacta cctgaccaga gacccaacca ctccactcgc ccgggctgcc 7260 tgggaaacag ttagacactc ccctatcaat tcatggctgg gaaacatcat ccagtatgct ccaaccatat gggttcgcat ggtcctaatg acacacttct tctccattct catggtccaa 7320 gacaccctgg accagaacct caactttgag atgtatggat cagtatactc cgtgaatcct 7380 ttggaccttc cagccataat tgagaggtta cacgggcttg acgccttttc tatgcacaca 7440 7500 tactctcacc acgaactgac gcgggtggct tcagccctca gaaaacttgg ggcgccaccc 7560 ctcagggtgt ggaagagtcg ggctcgcgca gtcagggcgt ccctcatctc ccgtggaggg 7620 aaagcggccg tttgcggccg atatctcttc aattgggcgg tgaagaccaa gctcaaactc 7680 actccattgc cggaggcgcg cctactggac ttatccagtt ggttcaccgt cggcgccggc gggggcgaca tttttcacag cgtgtcgcgc gcccgacccc gctcattact cttcggccta 7740 7800 ctcctacttt tcgtaggggt aggcctcttc ctactccccg ctcggtagag cggcacacac 7860 7920 tttttttttt ctttttttt tttttccctc tttcttccct tctcatctta ttctactttc tttcttggtg gctccatctt agccctagtc acggctagct gtgaaaggtc cgtgagccgc 7980 8024 atgactgcag agagtgccgt aactggtctc tctgcagatc atgt

Page 9

<210> 8001 DNA Hepatitis C virus <400> 60 gccagccccc gattgggggc gacactccac catagatcac tcccctgtga ggaactactg 120 tcttcacgca gaaagcgtct agccatggcg ttagtatgag tgtcgtgcag cctccaggac 180 ccccctccc gggagagcca tagtggtctg cggaaccggt gagtacaccg gaattgccag gacgaccggg tcctttcttg gatcaacccg ctcaatgcct ggagatttgg gcgtgccccc 240 300 gcgagactgc tagccgagta gtgttgggtc gcgaaaggcc ttgtggtact gcctgatagg 360 gtgcttgcga gtgccccggg aggtctcgta gaccgtgcac catgagcacg aatcctaaac ctcaaagaaa aaccaaacgt aacaccaacg ggcgcgccat gattgaacaa gatggattgc 420 480 acgcaggttc tccggccgct tgggtggaga ggctattcgg ctatgactgg gcacaacaga 540 caatcggctg ctctgatgcc gccgtgttcc ggctgtcagc gcaggggcgc ccggttcttt ttgtcaagac cgacctgtcc ggtgccctga atgaactgca ggacgaggca gcgcggctat 600 660 cgtggctggc cacgacgggc gttccttgcg cagctgtgct cgacgttgtc actgaagcgg gaagggactg gctgctattg ggcgaagtgc cggggcagga tctcctgtca tctcaccttg 720 ctcctgccga gaaagtatcc atcatggctg atgcaatgcg gcggctgcat acgcttgatc 780 cggctacctg cccattcgac caccaagcga aacatcgcat cgagcgagca cgtactcgga 840 tggaagccgg tcttgtcgat caggatgatc tggacgaaga gcatcagggg ctcgcgccag 900 960 ccgaactgtt cgccaggctc aaggcgcgca tgcccgacgg cgaggatctc gtcgtgaccc 1020 atggcgatgc ctgcttgccg aatatcatgg tggaaaatgg ccgcttttct ggattcatcg 1080 actgtggccg gctgggtgtg gcggaccgct atcaggacat agcgttggct acccgtgata ttgctgaaga gcttggcggc gaatgggctg accgcttcct cgtgctttac ggtatcgccg 1140 1200 ctcccgattc gcagcgcatc gccttctatc gccttcttga cgagttcttc tgagtttaaa cagaccacaa cggtttccct ctagcgggat caattccgcc cctctccctc ccccccct 1260 aacgttactg gccgaagccg cttggaataa ggccggtgtg cgtttgtcta tatgttattt 1320 1380 tccaccatat tgccgtcttt tggcaatgtg agggcccgga aacctggccc tgtcttcttg 1440 acgagcattc ctaggggtct ttcccctctc gccaaaggaa tgcaaggtct gttgaatgtc 1500 gtgaaggaag cagttcctct ggaagcttct tgaagacaaa caacgtctgt agcgaccctt 1560 tgcaggcagc ggaacccccc acctggcgac aggtgcctct gcggccaaaa gccacgtgta taagatacac ctgcaaaggc ggcacaaccc cagtgccacg ttgtgagttg gatagttgtg 1620 gaaagagtca aatggctctc ctcaagcgta ttcaacaagg ggctgaagga tgcccagaag 1680 Page 10

gtaccccatt	gtatgggatc	tgatctgggg	cctcggtgca	catgctttac	atgtgtttag	1740
tcgaggttaa	aaaacgtcta	ggccccccga	accacgggga	cgtggttttc	ctttgaaaaa	1800
cacgataata	ccatggcgcc	tattacggcc	tactcccaac	agacgcgagg	cctacttggc	1860
tgcatcatca	ctagcctcac	aggccgggac	aggaaccagg	tcgaggggga	ggtccaagtg	1920
gtctccaccg	caacacaatc	tttcctggcg	acctgcgtca	atggcgtgtg	ttggactgtc	1980
tatcatggtg	ccggctcaaa	gacccttgcc	ggcccaaagg	gcccaatcac	ccaaatgtac	2040
accaatgtgg	accaggacct	cgtcggctgg	caagcgcccc	ccggggcgcg	ttccttgaca	2100
ccatgcacct	gcggcagctc	ggacctttac	ttggtcacga	ggcatgccga	tgtcattccg	2160
gtgcgccggc	ggggcgacag	cagggggagc	ctactctccc	ccaggcccgt	ctcctacttg	2220
aagggctctt	cgggcggtcc	actgctctgc	ccctcggggc	acgctgtggg	catctttcgg	2280
gctgccgtgt	gcacccgagg	ggttgcgaag	gcggtggact	ttgtacccgt	cgagtctatg	2340
gaaaccacta	tgcggtcccc	ggtcttcacg	gacaactcgt	cccctccggc	cgtaccgcag	2400
acattccagg	tggcccatct	acacgcccct	actggtagcg	gcaagagcac	taaggtgccg	2460
gctgcgtatg	cagcccaagg	gtataaggtg	cttgtcctga	acccgtccgt	cgccgccacc	2520
ctaggtttcg	gggcgtatat	gtctaaggca	catggtatcg	accctaacat	cagaaccggg	2580
gtaaggacca	tcaccacggg	tgcccccatc	acgtactcca	cctatggcaa	gtttcttgcc	2640
gacggtggtt	gctctggggg	cgcctatgac	atcataatat	gtgatgagtg	ccactcaact	2700
gactcgacca	ctatcctggg	catcggcaca	gtcctggacc	aagcggagac	ggctggagcg	2760
cgactcgtcg	tgctcgccac	cgctacgcct	ccgggatcgg	tcaccgtgcc	acatccaaac	2820
atcgaggagg	tggctctgtc	cagcactgga	gaaatcccct	tttatggcaa	agccatcccc	2880
atcgagacca	tcaagggggg	gaggcacctc	attttctgcc	attccaagaa	gaaatgtgat	2940
gagctcgccg	cgaagctgtc	cggcctcgga	ctcaatgctg	tagcatatta	ccggggcctt	3000
gatgtatccg	tcataccaac	tagcggagac	gtcattgtcg	tagcaacgga	cgctctaatg	3060
acgggcttta	ccggcgattt	cgactcagtg	atcgactgca	atacatgtgt	cacccagaca	3120
gtcgacttca	gcctggaccc	gaccttcacc	attgagacga	cgaccgtgcc	acaagacgcg	3180
gtgtcacgct	cgcagcggcg	aggcaggact	ggtaggggca	ggatgggcat	ttacaggttt	3240
gtgactccag	gagaacggcc	ctcgggcatg	ttcgattcct	cggttctgtg	cgagtgctat	3300
gacgcgggct	gtgcttggta	cgagctcacg	cccgccgaga	cctcagttag	gttgcgggct	3360
tacctaaaca	caccagggtt	gcccgtctgc	caggaccatc	tggagttctg	ggagagcgtc	3420
tttacaggcc	tcacccacat	agacgcccat	ttcttgtccc	agactaagca	ggcaggagac	3480
aacttcccct	acctggtagc	ataccaggct	acggtgtgcg	ccagggctca	ggctccacct	3540

3600 ccatcgtggg accaaatgtg gaagtgtctc atacggctaa agcctacgct gcacgggcca 3660 acgcccctgc tgtataggct gggagccgtt caaaacgagg ttactaccac acaccccata 3720 accaaataca tcatggcatg catgtcggct gacctggagg tcgtcacgag cacctgggtg ctggtaggcg gagtcctagc agctctggcc gcgtattgcc tgacaacagg cagcgtggtc 3780 3840 attgtgggca ggatcatctt gtccggaaag ccggccatca ttcccgacag ggaagtcctt 3900 taccgggagt tcgatgagat ggaagagtgc gcctcacacc tcccttacat cgaacaggga atgcagctcg ccgaacaatt caaacagaag gcaatcgggt tgctgcaaac agccaccaag 3960 4020 caagcggagg ctgctgctcc cgtggtggaa tccaagtggc ggaccctcga agccttctgg 4080 gcgaagcata tgtggaattt catcagcggg atacaatatt tagcaggctt gtccactctg cctggcaacc ccgcgatagc atcactgatg gcattcacag cctctatcac cagcccgctc 4140 accacccaac ataccctcct gtttaacatc ctggggggat gggtggccgc ccaacttgct 4200 cctcccagcg ctgcttctgc tttcgtaggc gccggcatcg ctggagcggc tgttggcagc 4260 4320 ataggccttg ggaaggtgct tgtggatatt ttggcaggtt atggagcagg ggtggcaggc 4380 gcgctcgtgg cctttaaggt catgagcggc gagatgccct ccaccgagga cctggttaac 4440 ctactccctg ctatcctctc ccctggcgcc ctagtcgtcg gggtcgtgtg cgcagcgata 4500 ctgcgtcggc acgtgggccc aggggagggg gctgtgcagt ggatgaaccg gctgatagcg 4560 ttcgcttcgc ggggtaacca cgtctcccc acgcactatg tgcctgagag cgacgctgca 4620 gcacgtgtca ctcagatcct ctctagtctt accatcactc agctgctgaa gaggcttcac cagtggatca acgaggactg ctccacgcca tgctccggct cgtggctaag agatgtttgg 4680 4740 gattggatat gcacggtgtt gactgatttc aagacctggc tccagtccaa gctcctgccg 4800 cgattgccgg gagtcccctt cttctcatgt caacgtgggt acaagggagt ctggcggggc 4860 gacggcatca tgcaaaccac ctgcccatgt ggagcacaga tcaccggaca tgtgaaaaac ggttccatga ggatcgtggg gcctaggacc tgtagtaaca cgtggcatgg aacattcccc 4920 4980 attaacgcgt acaccacggg cccctgcacg ccctccccgg cgccaaatta ttctagggcg 5040 ctgtggcggg tggctgctga ggagtacgtg gaggttacgc gggtggggga tttccactac gtgacgggca tgaccactga caacgtaaag tgcccgtgtc aggttccggc ccccgaattc 5100 ttcacagaag tggatggggt gcggttgcac aggtacgctc cagcgtgcaa acccctccta 5160 5220 cgggaggagg tcacattcct ggtcgggctc aatcaatacc tggttgggtc acagctccca 5280 tgcgagcccg aaccggacgt agcagtgctc acttccatgc tcaccgaccc ctcccacatt 5340 acggcggaga cggctaagcg taggctggcc aggggatctc cccctcctt ggccagctca 5400 tcagctagcc agctgtctgc gccttccttg aaggcaacat gcactacccg tcatgactcc ccggacgctg acctcatcga ggccaacctc ctgtggcggc aggagatggg cgggaacatc 5460

Page 12

acccgcgtgg	agtcagaaaa	taaggtagta	attttggact	ctttcgagcc	gctccaagcg	5520
gaggaggatg	agagggaagt	atccgttccg	gcggagatcc	tgcggaggtc	caggaaattc	5580
cctcgagcga	tgcccatatg	ggcacgcccg	gattacaacc	ctccactgtt	agagtcctgg	5640
aaggacccgg	actacgtccc	tccagtggta	cacgggtgtc	cattgccgcc	tgccaaggcc	5700
cctccgatac	cacctccacg	gaggaagagg	acggttgtcc	tgtcagaatc	taccgtgtct	5760
tctgccttgg	cggagctcgc	cacaaagacc	ttcggcagct	ccgaatcgtc	ggccgtcgac	5820
agcggcacgg	caacggcctc	tcctgaccag	ccctccgacg	acggcgacgc	gggatccgac	5880
gttgagtcgt	actcctccat	gcccccctt	gagggggagc	cgggggatcc	cgatctcagc	5940
gacgggtctt	ggtctaccgt	aagcgaggag	gctagtgagg	acgtcgtctg	ctgctcgatg	6000
tcctacacat	ggacaggcgc	cctgatcacg	ccatgcgctg	cggaggaaac	caagctgccc	6060
atcaatgcac	tgagcaactc	tttgctccgt	caccacaact	tggtctatgc	tacaacatct	6120
cgcagcgcaa	gcctgcggca	gaagaaggtc	acctttgaca	gactgcaggt	cctggacgac	6180
cactaccggg	acgtgctcaa	ggagatgaag	gcgaaggcgt	ccacagttaa	ggctaaactt	6240
ctatccgtgg	aggaagcctg	taagctgacg	ccccacatt	cggccagatc	taaatttggc	6300
tatggggcaa	aggacgtccg	gaacctatcc	agcaaggccg	ttaaccacat	ccgctccgtg	6360
tggaaggact	tgctggaaga	cactgagaca	ccaattgaca	ccaccatcat	ggcaaaaaat	6420
gaggttttct	gcgtccaacc	agagaagggg	ggccgcaagc	cagctcgcct	tatcgtattc	6480
ccagatttgg	gggttcgtgt	gtgcgagaaa	atggcccttt	acgatgtggt	ctccaccctc	6540
cctcaggccg	tgatgggctc	ttcatacgga	ttccaatact	ctcctggaca	gcgggtcgag	6600
ttcctggtga	atgcctggaa	agcgaagaaa	tgccctatgg	gcttcgcata	tgacacccgc	6660
tgttttgact	caacggtcac	tgagaatgac	atccgtgttg	aggagtcaat	ctaccaatgt	6720
tgtgacttgg	ccccgaagc	cagacaggcc	ataaggtcgc	tcacagagcg	gctttacatc	6780
gggggccccc	tgactaattc	taaagggcag	aactgcggct	atcgccggtg	ccgcgcgagc	6840
ggtgtactga	cgaccagctg	cggtaatacc	ctcacatgtt	acttgaaggc	cgctgcggcc	6900
tgtcgagctg	cgaagctcca	ggactgcacg	atgctcgtat	gcggagacga	ccttgtcgtt	6960
atctgtgaaa	gcgcggggac	ccaagaggac	gaggcgagcc	tacgggcctt	cacggaggct	7020
atgactagat	actctgcccc	ccctggggac	ccgcccaaac	cagaatacga	cttggagttg	7080
ataacatcat	gctcctccaa	tgtgtcagtc	gcgcacgatg	catctggcaa	aagggtgtac	7140
tatctcaccc	gtgaccccac	caccccctt	gcgcgggctg	cgtgggagac	agctagacac	7200
actccagtca	attcctggct	aggcaacatc	atcatgtatg	cgcccacctt	gtgggcaagg	7260
atgatcctga	tgactcattt	cttctccatc	cttctagctc	aggaacaact	tgaaaaagcc	7320

attcaacgac tccatggcct	tagcgcattt	tcactccata	gttactctcc	aggtgagatc	7440
aatagggtgg cttcatgcct	caggaaactt	ggggtaccgc	ccttgcgagt	ctggagacat	7500
cgggccagaa gtgtccgcgc	taggctactg	tcccaggggg	ggagggctgc	cacttgtggc	7560
aagtacctct tcaactgggc	agtaaggacc	aagctcaaac	tcactccaat	cccggctgcg	7620
tcccagttgg atttatccag	ctggttcgtt	gctggttaca	gcgggggaga	catatatcac	7680
agcctgtctc gtgcccgacc	ccgctggttc	atgtggtgcc	tactcctact	ttctgtaggg	7740
gtaggcatct atctactccc	caaccgatga	acggggagct	aaacactcca	ggccaatagg	7800
ccatcctgtt tttttccctt	ttttttttc	tttttttt	tttttttt	ttttttttt	7860
ttttctcctt ttttttcct	cttttttcc	ttttctttcc	tttggtggct	ccatcttagc	7920
cctagtcacg gctagctgtg	aaaggtccgt	gagccgcttg	actgcagaga	gtgctgatac	7980
tggcctctct gcagatcaag	t				8001
<210> 4 <211> 8649 <212> DNA <213> Hepatitis C vi	rus				
<pre><400> 4 gccagccccc gattgggggc</pre>	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcacgca gaaagcgtct	agccatggcg	ttagtatgag	tgtcgtgcag	cctccaggac	120
ccccctccc gggagagcca	tagtggtctg	cggaaccggt	gagtacaccg	gaattgccag	180
gacgaccggg tcctttcttg	gatcaacccg	ctcaatgcct	ggagatttgg	gcgtgccccc	240
gcgagactgc tagccgagta	gtgttgggtc	gcgaaaggcc	ttgtggtact	gcctgatagg	300
gtgcttgcga gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaaagaaa aaccaaacgt	aacaccaacg	ggcgcgccat	gattgaacaa	gatggattgc	420
acgcaggttc tccggccgct	tgggtggaga	ggctattcgg	ctatgactgg	gcacaacaga	480
caatcggctg ctctgatgcc	gccgtgttcc	ggctgtcagc	gcaggggcgc	ccggttcttt	540
ttgtcaagac cgacctgtcc	ggtgccctga	atgaactgca	ggacgaggca	gcgcggctat	600
cgtggctggc cacgacgggc	gttccttgcg	cagctgtgct	cgacgttgtc	actgaagcgg	660
gaagggactg gctgctattg	ggcgaagtgc	cggggcagga	tctcctgtca	tctcaccttg	720
ctcctgccga gaaagtatcc	atcatggctg	atgcaatgcg	gcggctgcat	acgcttgatc	780
cggctacctg cccattcgac	caccaagcga	aacatcgcat	cgagcgagca	cgtactcgga	840
tggaagccgg tcttgtcgat	caggatgatc	tggacgaaga	gcatcagggg	ctcgcgccag	900
ccgaactgtt cgccaggctc	aaggcgcgca	tgcccgacgg	cgaggatctc	gtcgtgaccc	960

DNA sequence listing.ST25.txt ctagattgtc agatctacgg ggcctgttac tccattgagc cacttgacct acctcagatc

7380

DNA sequence listing.ST25.txt atggcgatgc ctgcttgccg aatatcatgg tggaaaatgg ccgcttttct ggattcatcg 1020 actgtggccg gctgggtgtg gcggaccgct atcaggacat agcgttggct acccgtgata 1080 1140 ttgctgaaga gcttggcggc gaatgggctg accgcttcct cgtgctttac ggtatcgccg 1200 ctcccgattc gcagcgcatc gccttctatc gccttcttga cgagttcttc tgagtttaaa 1260 cagaccacaa cggtttccct ctagcgggat caattccgcc cctctccctc ccccccct 1320 aacgttactg gccgaagccg cttggaataa ggccggtgtg cgtttgtcta tatgttattt 1380 tccaccatat tgccgtcttt tggcaatgtg agggcccgga aacctggccc tgtcttcttg 1440 acgagcattc ctaggggtct ttcccctctc gccaaaggaa tgcaaggtct gttgaatgtc gtgaaggaag cagttcctct ggaagcttct tgaagacaaa caacgtctgt agcgaccctt 1500 tgcaggcagc ggaacccccc acctggcgac aggtgcctct gcggccaaaa gccacgtgta 1560 1620 taagatacac ctgcaaaggc ggcacaaccc cagtgccacg ttgtgagttg gatagttgtg 1680 gaaagagtca aatggctctc ctcaagcgta ttcaacaagg ggctgaagga tgcccagaag gtaccccatt gtatgggatc tgatctgggg cctcggtgca catgctttac atgtgtttag 1740 1800 tcgaggttaa aaaacgtcta ggccccccga accacgggga cgtggttttc ctttgaaaaa 1860 cacgataata ccatggaccg ggagatggca gcatcgtgcg gaggcgcggt tttcgtaggt 1920 ctgatactct tgaccttgtc accgcactat aagctgttcc tcgctaggct catatggtgg 1980 ttacaatatt ttatcaccag ggccgaggca cacttgcaag tgtggatccc cccctcaac gttcgggggg gccgcgatgc cgtcatcctc ctcacgtgcg cgatccaccc agagctaatc 2040 2100 tttaccatca ccaaaatctt gctcgccata ctcggtccac tcatggtgct ccaggctggt ataaccaaag tgccgtactt cgtgcgcgca cacgggctca ttcgtgcatg catgctggtg 2160 cggaaggttg ctgggggtca ttatgtccaa atggctctca tgaagttggc cgcactgaca 2220 2280 ggtacgtacg tttatgacca tctcacccca ctgcgggact gggcccacgc gggcctacga gaccttgcgg tggcagttga gcccgtcgtc ttctctgata tggagaccaa ggttatcacc 2340 2400 tggggggcag acaccgcggc gtgtggggac atcatcttgg gcctgcccgt ctccgcccgc 2460 agggggaggg agatacatct gggaccggca gacagccttg aagggcaggg gtggcgactc ctcgcgccta ttacggccta ctcccaacag acgcgaggcc tacttggctg catcatcact 2520 agcctcacag gccgggacag gaaccaggtc gagggggagg tccaagtggt ctccaccgca 2580 2640 acacaatctt tcctggcgac ctgcgtcaat ggcgtgtgtt ggactgtcta tcatggtgcc 2700 ggctcaaaga cccttgccgg cccaaagggc ccaatcaccc aaatgtacac caatgtggac 2760 caggaceteg teggetggea agegeeece ggggegegtt cettgacace atgeaectge ggcagctcgg acctttactt ggtcacgagg catgccgatg tcattccggt gcgccggcgg 2820 2880 ggcgacagca gggggagcct actctcccc aggcccgtct cctacttgaa gggctcttcg

Page 15

ggcggtccac	tgctctgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgccgtgtgc	2940
acccgagggg	ttgcgaaggc	ggtggacttt	gtacccgtcg	agtctatgga	aaccactatg	3000
cggtccccgg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccaggtg	3060
gcccatctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgcgtatgca	3120
gcccaagggt	ataaggtgct	tgtcctgaac	ccgtccgtcg	ccgccaccct	aggtttcggg	3180
gcgtatatgt	ctaaggcaca	tggtatcgac	cctaacatca	gaaccggggt	aaggaccatc	3240
accacgggtg	ccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cggtggttgc	3300
tctgggggcg	cctatgacat	cataatatgt	gatgagtgcc	actcaactga	ctcgaccact	3360
atcctgggca	tcggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	3420
ctcgccaccg	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggaggtg	3480
gctctgtcca	gcactggaga	aatccccttt	tatggcaaag	ccatccccat	cgagaccatc	3540
aaggggggga	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgccgcg	3600
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3660
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaatgac	gggctttacc	3720
ggcgatttcg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3780
ctggacccga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcggt	gtcacgctcg	3840
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3900
gaacggccct	cgggcatgtt	cgattcctcg	gttctgtgcg	agtgctatga	cgcgggctgt	3960
gcttggtacg	agctcacgcc	cgccgagacc	tcagttaggt	tgcgggctta	cctaaacaca	4020
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	4080
acccacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	4140
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	4200
caaatgtgga	agtgtctcat	acggctaaag	cctacgctgc	acgggccaac	gcccctgctg	4260
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	4320
atggcatgca	tgtcggctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	4380
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtggtcat	tgtgggcagg	4440
atcatcttgt	ccggaaagcc	ggccatcatt	cccgacaggg	aagtccttta	ccgggagttc	4500
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacagggaat	gcagctcgcc	4560
gaacaattca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggaggct	4620
gctgctcccg	tggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4680
tggaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4740

		DNA S	equence lis	ting.ST25.t	xt	
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgctcac	cacccaacat	4800
accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	tcccagcgct	4860
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4920
aaggtgcttg	tggatatttt	ggcaggttat	ggagcagggg	tggcaggcgc	gctcgtggcc	4980
tttaaggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	5040
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	5100
gtgggcccag	gggaggggc	tgtgcagtgg	atgaaccggc	tgatagcgtt	cgcttcgcgg	5160
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	5220
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	5280
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	5340
acggtgttga	ctgatttcaa	gacctggctc	cagtccaagc	tcctgccgcg	attgccggga	5400
gtccccttct	tctcatgtca	acgtgggtac	aagggagtct	ggcggggcga	cggcatcatg	5460
caaaccacct	gcccatgtgg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	5520
atcgtggggc	ctaggacctg	tagtaacacg	tggcatggaa	cattccccat	taacgcgtac	5580
accacgggcc	cctgcacgcc	ctcccggcg	ccaaattatt	ctagggcgct	gtggcgggtg	5640
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5700
accactgaca	acgtaaagtg	cccgtgtcag	gttccggccc	ccgaattctt	cacagaagtg	5760
gatggggtgc	ggttgcacag	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggaggtc	5820
acattcctgg	tcgggctcaa	tcaatacctg	gttgggtcac	agctcccatg	cgagcccgaa	5880
ccggacgtag	cagtgctcac	ttccatgctc	accgacccct	cccacattac	ggcggagacg	5940
gctaagcgta	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctagccag	6000
ctgtctgcgc	cttccttgaa	ggcaacatgc	actacccgtc	atgactcccc	ggacgctgac	6060
ctcatcgagg	ccaacctcct	gtggcggcag	gagatgggcg	ggaacatcac	ccgcgtggag	6120
tcagaaaata	aggtagtaat	tttggactct	ttcgagccgc	tccaagcgga	ggaggatgag	6180
agggaagtat	ccgttccggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	6240
cccatatggg	cacgcccgga	ttacaaccct	ccactgttag	agtcctggaa	ggacccggac	6300
tacgtccctc	cagtggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tccgatacca	6360
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgccttggcg	6420
gagctcgcca	caaagacctt	cggcagctcc	gaatcgtcgg	ccgtcgacag	cggcacggca	6480
acggcctctc	ctgaccagcc	ctccgacgac	ggcgacgcgg	gatccgacgt	tgagtcgtac	6540
tcctccatgc	cccccttga	gggggagccg	ggggatcccg	atctcagcga	cgggtcttgg	6600
tctaccgtaa	gcgaggaggc	tagtgaggac	gtcgtctgct Page	gctcgatgtc 17	ctacacatgg	6660

acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgcccat	caatgcactg	6720
agcaactctt	tgctccgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6780
ctgcggcaga	agaaggtcac	ctttgacaga	ctgcaggtcc	tggacgacca	ctaccgggac	6840
gtgctcaagg	agatgaaggc	gaaggcgtcc	acagttaagg	ctaaacttct	atccgtggag	6900
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aatttggcta	tggggcaaag	6960
gacgtccgga	acctatccag	caaggccgtt	aaccacatcc	gctccgtgtg	gaaggacttg	7020
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	7080
gtccaaccag	agaagggggg	ccgcaagcca	gctcgcctta	tcgtattccc	agatttgggg	7140
gttcgtgtgt	gcgagaaaat	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	7200
atgggctctt	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctggtgaat	7260
gcctggaaag	cgaagaaatg	ccctatgggc	ttcgcatatg	acacccgctg	ttttgactca	7320
acggtcactg	agaatgacat	ccgtgttgag	gagtcaatct	accaatgttg	tgacttggcc	7380
cccgaagcca	gacaggccat	aaggtcgctc	acagagcggc	tttacatcgg	gggccccctg	7440
actaattcta	aagggcagaa	ctgcggctat	cgccggtgcc	gcgcgagcgg	tgtactgacg	7500
accagctgcg	gtaataccct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	7560
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	7620
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7680
tctgccccc	ctggggaccc	gcccaaacca	gaatacgact	tggagttgat	aacatcatgc	7740
tcctccaatg	tgtcagtcgc	gcacgatgca	tctggcaaaa	gggtgtacta	tctcacccgt	7800
gaccccacca	cccccttgc	gcgggctgcg	tgggagacag	ctagacacac	tccagtcaat	7860
tcctggctag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatcctgatg	7920
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7980
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	8040
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	tagggtggct	8100
tcatgcctca	ggaaacttgg	ggtaccgccc	ttgcgagtct	ggagacatcg	ggccagaagt	8160
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	8220
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	8280
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	8340
gcccgacccc	gctggttcat	gtggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	8400
ctactcccca	accgatgaac	ggggagctaa	acactccagg	ccaataggcc	atcctgtttt	8460
tttccctttt	ttttttctt	tttttttt	tttttttt	tttttttt	ttctcctttt	8520

DNA sequence listing.ST25.txt tttttcctct ttttttcctt tggtggctcc atcttagccc tagtcacggc	8580
tagctgtgaa aggtccgtga gccgcttgac tgcagagagt gctgatactg gcctctctgc	8640
agatcaagt	8649
<210> 5 <211> 8637 <212> DNA <213> Hepatitis C virus	
<400> 5 gccagccccc gattgggggc gacactccac catagatcac tcccctgtga ggaactactg	60
tcttcacgca gaaagcgtct agccatggcg ttagtatgag tgtcgtgcag cctccaggac	120
ccccctccc gggagagcca tagtggtctg cggaaccggt gagtacaccg gaattgccag	180
gacgaccggg tcctttcttg gatcaacccg ctcaatgcct ggagatttgg gcgtgccccc	240
gcgagactgc tagccgagta gtgttgggtc gcgaaaggcc ttgtggtact gcctgatagg	300
gtgcttgcga gtgccccggg aggtctcgta gaccgtgcac catgagcacg aatcctaaac	360
ctcaaagaaa aaccaaaggg cgcgccatga ttgaacaaga tggattgcac gcaggttctc	420
cggccgcttg ggtggagagg ctattcggct atgactgggc acaacagaca atcggctgct	480
ctgatgccgc cgtgttccgg ctgtcagcgc aggggcgccc ggttctttt gtcaagaccg	540
acctgtccgg tgccctgaat gaactgcagg acgaggcagc gcggctatcg tggctggcca	600
cgacgggcgt tccttgcgca gctgtgctcg acgttgtcac tgaagcggga agggactggc	660
tgctattggg cgaagtgccg gggcaggatc tcctgtcatc tcaccttgct cctgccgaga	720
aagtatccat catggctgat gcaatgcggc ggctgcatac gcttgatccg gctacctgcc	780
cattcgacca ccaagcgaaa catcgcatcg agcgagcacg tactcggatg gaagccggtc	840
ttgtcgatca ggatgatctg gacgaagagc atcaggggct cgcgccagcc gaactgttcg	900
ccaggctcaa ggcgcgcatg cccgacggcg aggatctcgt cgtgacccat ggcgatgcct	960
gcttgccgaa tatcatggtg gaaaatggcc gcttttctgg attcatcgac tgtggccggc	1020
tgggtgtggc ggaccgctat caggacatag cgttggctac ccgtgatatt gctgaagagc	1080
ttggcggcga atgggctgac cgcttcctcg tgctttacgg tatcgccgct cccgattcgc	1140
agcgcatcgc cttctatcgc cttcttgacg agttcttctg agtttaaaca gaccacaacg	1200
gtttccctct agcgggatca attccgcccc tctccctccc cccccctaa cgttactggc	1260
cgaagccgct tggaataagg ccggtgtgcg tttgtctata tgttattttc caccatattg	1320
ccgtcttttg gcaatgtgag ggcccggaaa cctggccctg tcttcttgac gagcattcct	1380
aggggtcttt cccctctcgc caaaggaatg caaggtctgt tgaatgtcgt gaaggaagca	1440
gttcctctgg aagcttcttg aagacaaaca acgtctgtag cgaccctttg caggcagcgg	1500

DNA sequence listing.ST25.txt 1560 aacccccac ctggcgacag gtgcctctgc ggccaaaagc cacgtgtata agatacacct 1620 gcaaaggcgg cacaacccca gtgccacgtt gtgagttgga tagttgtgga aagagtcaaa 1680 tggctctcct caagcgtatt caacaagggg ctgaaggatg cccagaaggt accccattgt 1740 atgggatctg atctggggcc tcggtgcaca tgctttacat gtgtttagtc gaggttaaaa 1800 aacgtctagg ccccccgaac cacggggacg tggttttcct ttgaaaaaca cgataatacc 1860 atggaccggg agatggcagc atcgtgcgga ggcgcggttt tcgtaggtct gatactcttg 1920 accttgtcac cgcactataa gctgttcctc gctaggctca tatggtggtt acaatatttt 1980 atcaccaggg ccgaggcaca cttgcaagtg tggatccccc ccctcaacgt tcgggggggc 2040 cgcgatgccg tcatcctcct cacgtgcgcg atccacccag agctaatctt taccatcacc aaaatcttgc tcgccatact cggtccactc atggtgctcc aggctggtat aaccaaagtg 2100 2160 ccgtacttcg tgcgcgcaca cgggctcatt cgtgcatgca tgctggtgcg gaaggttgct 2220 gggggtcatt atgtccaaat ggctctcatg aagttggccg cactgacagg tacgtacgtt tatgaccatc tcaccccact gcgggactgg gcccacgcgg gcctacgaga ccttgcggtg 2280 2340 gcagttgagc ccgtcgtctt ctctgatatg gagaccaagg ttatcacctg gggggcagac 2400 accgcggcgt gtggggacat catcttgggc ctgcccgtct ccgcccgcag ggggagggag 2460 atacatctgg gaccggcaga cagccttgaa gggcaggggt ggcgactcct cgcgcctatt 2520 acggcctact cccaacagac gcgaggccta cttggctgca tcatcactag cctcacaggc 2580 cgggacagga accaggtcga gggggaggtc caagtggtct ccaccgcaac acaatctttc 2640 ctggcgacct gcgtcaatgg cgtgtgttgg actgtctatc atggtgccgg ctcaaagacc 2700 cttgccggcc caaagggccc aatcacccaa atgtacacca atgtggacca ggacctcgtc 2760 ggctggcaag cgccccccgg ggcgcgttcc ttgacaccat gcacctgcgg cagctcggac ctttacttgg tcacgaggca tgccgatgtc attccggtgc gccggcgggg cgacagcagg 2820 2880 gggagcctac tctccccag gcccgtctcc tacttgaagg gctcttcggg cggtccactg 2940 ctctgcccct cggggcacgc tgtgggcatc tttcgggctg ccgtgtgcac ccgaggggtt 3000 gcgaaggcgg tggactttgt acccgtcgag tctatggaaa ccactatgcg gtccccggtc 3060 ttcacggaca actcgtcccc tccggccgta ccgcagacat tccaggtggc ccatctacac 3120 gcccctactg gtagcggcaa gagcactaag gtgccggctg cgtatgcagc ccaagggtat 3180 aaggtgcttg tcctgaaccc gtccgtcgcc gccaccctag gtttcggggc gtatatgtct aaggcacatg gtatcgaccc taacatcaga accggggtaa ggaccatcac cacgggtgcc 3240 3300 cccatcacgt actccaccta tggcaagttt cttgccgacg gtggttgctc tgggggcgcc

tatgacatca taatatgtga tgagtgccac tcaactgact cgaccactat cctgggcatc

ggcacagtcc tggaccaagc ggagacggct ggagcgcgac tcgtcgtgct cgccaccgct Page 20 3360

3420

acgcctccgg	gatcggtcac	cgtgccacat	ccaaacatcg	aggaggtggc	tctgtccagc	3480
actggagaaa	tcccctttta	tggcaaagcc	atccccatcg	agaccatcaa	gggggggagg	3540
cacctcattt	tctgccattc	caagaagaaa	tgtgatgagc	tcgccgcgaa	gctgtccggc	3600
ctcggactca	atgctgtagc	atattaccgg	ggccttgatg	tatccgtcat	accaactagc	3660
ggagacgtca	ttgtcgtagc	aacggacgct	ctaatgacgg	gctttaccgg	cgatttcgac	3720
tcagtgatcg	actgcaatac	atgtgtcacc	cagacagtcg	acttcagcct	ggacccgacc	3780
ttcaccattg	agacgacgac	cgtgccacaa	gacgcggtgt	cacgctcgca	gcggcgaggc	3840
aggactggta	ggggcaggat	gggcatttac	aggtttgtga	ctccaggaga	acggccctcg	3900
ggcatgttcg	attcctcggt	tctgtgcgag	tgctatgacg	cgggctgtgc	ttggtacgag	3960
ctcacgcccg	ccgagacctc	agttaggttg	cgggcttacc	taaacacacc	agggttgccc	4020
gtctgccagg	accatctgga	gttctgggag	agcgtcttta	caggcctcac	ccacatagac	4080
gcccatttct	tgtcccagac	taagcaggca	ggagacaact	tcccctacct	ggtagcatac	4140
caggctacgg	tgtgcgccag	ggctcaggct	ccacctccat	cgtgggacca	aatgtggaag	4200
tgtctcatac	ggctaaagcc	tacgctgcac	gggccaacgc	ccctgctgta	taggctggga	4260
gccgttcaaa	acgaggttac	taccacacac	cccataacca	aatacatcat	ggcatgcatg	4320
tcggctgacc	tggaggtcgt	cacgagcacc	tgggtgctgg	taggcggagt	cctagcagct	4380
ctggccgcgt	attgcctgac	aacaggcagc	gtggtcattg	tgggcaggat	catcttgtcc	4440
ggaaagccgg	ccatcattcc	cgacagggaa	gtcctttacc	gggagttcga	tgagatggaa	4500
gagtgcgcct	cacacctccc	ttacatcgaa	cagggaatgc	agctcgccga	acaattcaaa	4560
cagaaggcaa	tcgggttgct	gcaaacagcc	accaagcaag	cggaggctgc	tgctcccgtg	4620
gtggaatcca	agtggcggac	cctcgaagcc	ttctgggcga	agcatatgtg	gaatttcatc	4680
agcgggatac	aatatttagc	aggcttgtcc	actctgcctg	gcaaccccgc	gatagcatca	4740
ctgatggcat	tcacagcctc	tatcaccagc	ccgctcacca	cccaacatac	cctcctgttt	4800
aacatcctgg	ggggatgggt	ggccgcccaa	cttgctcctc	ccagcgctgc	ttctgctttc	4860
gtaggcgccg	gcatcgctgg	agcggctgtt	ggcagcatag	gccttgggaa	ggtgcttgtg	4920
gatattttgg	caggttatgg	agcaggggtg	gcaggcgcgc	tcgtggcctt	taaggtcatg	4980
agcggcgaga	tgccctccac	cgaggacctg	gttaacctac	tccctgctat	cctctcccct	5040
ggcgccctag	tcgtcggggt	cgtgtgcgca	gcgatactgc	gtcggcacgt	gggcccaggg	5100
gagggggctg	tgcagtggat	gaaccggctg	atagcgttcg	cttcgcgggg	taaccacgtc	5160
tccccacgc	actatgtgcc	tgagagcgac	gctgcagcac	gtgtcactca	gatcctctct	5220
agtcttacca	tcactcagct	gctgaagagg	cttcaccagt	ggatcaacga	ggactgctcc	5280

DNA sequence listing.ST25.txt 5340 acgccatgct ccggctcgtg gctaagagat gtttgggatt ggatatgcac ggtgttgact 5400 gatttcaaga cctggctcca gtccaagctc ctgccgcgat tgccgggagt ccccttcttc 5460 tcatgtcaac gtgggtacaa gggagtctgg cggggcgacg gcatcatgca aaccacctgc 5520 ccatgtggag cacagatcac cggacatgtg aaaaacggtt ccatgaggat cgtggggcct 5580 aggacctgta gtaacacgtg gcatggaaca ttccccatta acgcgtacac cacgggcccc 5640 tgcacgccct ccccggcgcc aaattattct agggcgctgt ggcgggtggc tgctgaggag 5700 tacgtggagg ttacgcgggt gggggatttc cactacgtga cgggcatgac cactgacaac 5760 gtaaagtgcc cgtgtcaggt tccggccccc gaattcttca cagaagtgga tggggtgcgg 5820 ttgcacaggt acgctccagc gtgcaaaccc ctcctacggg aggaggtcac attcctggtc gggctcaatc aatacctggt tgggtcacag ctcccatgcg agcccgaacc ggacgtagca 5880 gtgctcactt ccatgctcac cgacccctcc cacattacgg cggagacggc taagcgtagg 5940 ctggccaggg gatctccccc ctccttggcc agctcatcag ctagccagct gtctgcgcct 6000 tccttgaagg caacatgcac tacccgtcat gactccccgg acgctgacct catcgaggcc 6060 6120 aacctcctgt ggcggcagga gatgggcggg aacatcaccc gcgtggagtc agaaaataag 6180 gtagtaattt tggactcttt cgagccgctc caagcggagg aggatgagag ggaagtatcc 6240 gttccggcgg agatcctgcg gaggtccagg aaattccctc gagcgatgcc catatgggca 6300 cgcccggatt acaaccctcc actgttagag tcctggaagg acccggacta cgtccctcca 6360 gtggtacacg ggtgtccatt gccgcctgcc aaggcccctc cgataccacc tccacggagg aagaggacgg ttgtcctgtc agaatctacc gtgtcttctg ccttggcgga gctcgccaca 6420 6480 aagaccttcg gcagctccga atcgtcggcc gtcgacagcg gcacggcaac ggcctctcct 6540 gaccagccct ccgacgacgg cgacgcggga tccgacgttg agtcgtactc ctccatgccc ccccttgagg gggagccggg ggatcccgat ctcagcgacg ggtcttggtc taccgtaagc 6600 gaggaggcta gtgaggacgt cgtctgctgc tcgatgtcct acacatggac aggcgccctg 6660 6720 atcacgccat gcgctgcgga ggaaaccaag ctgcccatca atgcactgag caactctttg 6780 ctccgtcacc acaacttggt ctatgctaca acatctcgca gcgcaagcct gcggcagaag aaggtcacct ttgacagact gcaggtcctg gacgaccact accgggacgt gctcaaggag 6840 6900 atgaaggcga aggcgtccac agttaaggct aaacttctat ccgtggagga agcctgtaag 6960 ctgacgcccc cacattcggc cagatctaaa tttggctatg gggcaaagga cgtccggaac 7020 ctatccagca aggccgttaa ccacatccgc tccgtgtgga aggacttgct ggaagacact 7080 gagacaccaa ttgacaccac catcatggca aaaaatgagg ttttctgcgt ccaaccagag

aaggggggcc gcaagccagc tcgccttatc gtattcccag atttgggggt tcgtgtgtgc

gagaaaatgg ccctttacga tgtggtctcc accctccctc aggccgtgat gggctcttca

Page 22

7140 7200

tacggattcc aatactctcc	tggacagcgg	gtcgagttcc	tggtgaatgc	ctggaaagcg	7260
aagaaatgcc ctatgggctt	cgcatatgac	acccgctgtt	ttgactcaac	ggtcactgag	7320
aatgacatcc gtgttgagga	gtcaatctac	caatgttgtg	acttggcccc	cgaagccaga	7380
caggccataa ggtcgctcad	agagcggctt	tacatcgggg	gcccctgac	taattctaaa	7440
gggcagaact gcggctatcg	ccggtgccgc	gcgagcggtg	tactgacgac	cagctgcggt	7500
aataccctca catgttactt	gaaggccgct	gcggcctgtc	gagctgcgaa	gctccaggac	7560
tgcacgatgc tcgtatgcgg	agacgacctt	gtcgttatct	gtgaaagcgc	ggggacccaa	7620
gaggacgagg cgagcctacg	ggccttcacg	gaggctatga	ctagatactc	tgcccccct	7680
ggggacccgc ccaaaccaga	atacgacttg	gagttgataa	catcatgctc	ctccaatgtg	7740
tcagtcgcgc acgatgcate	tggcaaaagg	gtgtactatc	tcacccgtga	ccccaccacc	7800
ccccttgcgc gggctgcgtg	ggagacagct	agacacactc	cagtcaattc	ctggctaggc	7860
aacatcatca tgtatgcgc	caccttgtgg	gcaaggatga	tcctgatgac	tcatttcttc	7920
tccatccttc tagctcagga	acaacttgaa	aaagccctag	attgtcagat	ctacggggcc	7980
tgttactcca ttgagccac	tgacctacct	cagatcattc	aacgactcca	tggccttagc	8040
gcattttcac tccatagtta	ctctccaggt	gagatcaata	gggtggcttc	atgcctcagg	8100
aaacttgggg taccgccct	gcgagtctgg	agacatcggg	ccagaagtgt	ccgcgctagg	8160
ctactgtccc agggggggag	ggctgccact	tgtggcaagt	acctcttcaa	ctgggcagta	8220
aggaccaagc tcaaactca	tccaatcccg	gctgcgtccc	agttggattt	atccagctgg	8280
ttcgttgctg gttacagcgg	gggagacata	tatcacagcc	tgtctcgtgc	ccgaccccgc	8340
tggttcatgt ggtgcctac	cctactttct	gtaggggtag	gcatctatct	actccccaac	8400
cgatgaacgg ggagctaaa	actccaggcc	aataggccat	cctgttttt	tccctttttt	8460
tttttctttt tttttttt	ttttttttt	tttttttt	ctcctttttt	tttcctcttt	8520
ttttcctttt ctttccttt	gtggctccat	cttagcccta	gtcacggcta	gctgtgaaag	8580
gtccgtgagc cgcttgact	; cagagagtgc	tgatactggc	ctctctgcag	atcaagt	8637
<210> 6 <211> 419 <212> DNA <213> Hepatitis C V	rus				
<400> 6 gggggcgaca ctccaccata	gatcactccc	ctgtgaggaa	ctactgtctt	cacgcagaaa	60
gcgtctagcc atggcgttag	, tatgagtgtc	gtgcagcctc	caggaccccc	cctcccggga	120
gagccatagt ggtctgcgg	accggtgagt	acaccggaat	tgccaggacg	accgggtcct	180
ttcttggatc aacccgctc	atgcctggag	atttgggcgt Page	gcccccgcga 23	gactgctagc	240

DNA sequence listing.ST25.txt cgagtagtgt tgggtcgcga aaggccttgt ggtactgcct gatagggtgc ttgcgagtgc 300 cccgggaggt ctcgtagacc gtgcaccatg agcacgaatc ctaaacctca aagaaaaacc 360 419 aaagggcgcg ccatgattga acaagatgga ttgcacgcag gttctccggc cgcttgggt <210> <211> 23 <212> DNA <213> Artificial <220> <223> Primer sequence <400> 7 23 gggggcgaca ctccaccata gat <210> <211> 41 <212> DNA <213> Artificial <220> <223> Primer sequence <400> 8 41 atttaggtga cactatagaa acccaagcgg ccggagaacc t